

SEQUENCE LISTING

<110> Zauderer, Maurice
Paris, Mark J.
Smith, Ernest S.

<120> Targeted MHC Class I Alpha3 Vaccine Delivery Systems

<130> 1843.0120001

<150> US 60/457,896

<151> 2003-03-28

<160> 53

<170> PatentIn version 3.2

<210> 1

<211> 276

<212> DNA

<213> Homo sapiens

<400> 1

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gaccagaccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag	180
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catgagggtt tgcccaagcc cctcaccctg agatgg	276

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<211> 1075

<212> DNA

<213> Artificial Sequence

<220>

<223> Assembled Ig Gamma Heavy Chain

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accctcctcc aagagcacct ctggggggcac agcggccctg ggctgcctgg tcaaggacta	180
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cccagcacct gaactcctgg ggggaccgtc agtcttctc tccccccaa aaccaagga	480
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caactacaag	accacgcctc	ccgtgctgga	ctccgacggc	tccttcttcc	tctacagcaa	960
gctcaccgtg	gacaagagca	gggtggcagca	ggggaacgtc	ttctcatgct	ccgtgatgca	1020
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<210> 3
<211> 2003
<212> DNA
<213> Artificial Sequence

<220>
<223> Ig alpha3 assembled chimera

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ggagatcaca ctgacctggc agcgggatgg ggaggaccag acccaggaca cggagctcgt 1860
ggagaccagg cctgcagggg atggaacctt ccagaagtgg gcggctgtgg tggcgccttc 1920
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<210> 4
<211> 659
<212> PRT
<213> Artificial Sequence
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<223> Ig alpha3 assembled chimera
<400> 4

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Ala His Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
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Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
35 40 45
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
50 55 60
Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
65 70 75 80

Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	85	90	95
Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	100	105	110
Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	115	120	125
Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	130	135	140
Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	145	150	155
Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	165	170	175
Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	180	185	190
Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	195	200	205
Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	210	215	220
Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	225	230	235
Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	245	250	255
Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	260	265	270
Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	275	280	285
Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	290	295	300
Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	305	310	315
Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	325	330	335

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
340 345 350

Gly Lys Gly Gly Gly Ser Ser Asp Ala Pro Lys Thr His Met Thr His
355 360 365

His Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Ser
370 375 380

Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp
385 390 395 400

Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp Gly
405 410 415

Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu Gln
420 425 430

Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu Thr
435 440 445

Leu Arg Trp Gly Gly Gly Ser Ser Glu Phe Gly Gly Gly Ser Ser Asp
450 455 460

Ala Pro Lys Thr His Met Thr His His Ala Val Ser Asp His Glu Ala
465 470 475 480

Thr Leu Arg Cys Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu
485 490 495

Thr Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val
500 505 510

Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val
515 520 525

Val Val Pro Ser Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln His
530 535 540

Glu Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Gly Gly Gly Ser Ser
545 550 555 560

Arg Ser Gly Gly Gly Ser Ser Asp Ala Pro Lys Thr His Met Thr His
565 570 575

His Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Ser

580

585

590

Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp
595 600 605

Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp Gly
610 615 620

Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu Gln
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Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu Thr
645 650 655

Leu Arg Trp

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<211> 448
<212> DNA
<213> Artificial Sequence

<220>
<223> CMV peptide-beta2-microglobulin chimera

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gctcagggtgg gtcaggaggc atccagcgta ctccaaagat tcagggtttac tcacgtcatc 180
cagcagagaa tggaaagtca aatttcctga attgctatgt gtctgggttt catccatccg 240
acattgaagt tgacttactg aagaatggag agagaattga aaaagtggag cattcagact 300
tgtctttcag caaggactgg tctttctatc tcttgacta cactgaattc acccccactg 360
aaaaagatga gtatgcctgc cgtgtgaacc atgtgacttt gtcacagccc aagatagtta 420
agtgggatcg agacatgtaa ggatcccg 448

<210> 6
<211> 143
<212> PRT
<213> Artificial Sequence

<220>
<223> CMV peptide-beta2-microglobulin chimera

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-7-

Gly Leu Glu Ala Asn Leu Val Pro Met Val Ala Thr Val Gly Gly Gly
20 25 30

Gly Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Gln Arg Thr
35 40 45

Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu Asn Gly Lys Ser
50 55 60

Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro Ser Asp Ile Glu
65 70 75 80

Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys Val Glu His Ser
85 90 95

Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr Leu Leu Tyr Tyr Thr
100 105 110

Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala Cys Arg Val Asn His
115 120 125

Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp Asp Arg Asp Met
130 135 140

<210> 7
<211> 9
<212> PRT
<213> Homo sapiens

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Ser Val Ala Pro Pro Pro Glu Glu Val
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<210> 8
<211> 8
<212> PRT
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<400> 8

Val Ala Pro Pro Pro Glu Glu Val
1 5

<210> 9
<211> 8
<212> PRT
<213> Homo sapiens

<400> 9

Glu Val Glu Pro Gly Ser Gly Val

1 5

<210> 10
<211> 10
<212> PRT
<213> Homo sapiens

<400> 10

Glu Val Glu Pro Gly Ser Gly Val Arg Ile
1 5 10

<210> 11
<211> 8
<212> PRT
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<400> 11

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1 5

<210> 12
<211> 9
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<213> Homo sapiens

<400> 12

Ala Thr Tyr Leu Glu Leu Ala Ser Ala
1 5

<210> 13
<211> 10
<212> PRT
<213> Homo sapiens

<400> 13

Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val
1 5 10

<210> 14
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Tyr Leu Glu Leu Ala Ser Ala Val
1 5

<210> 15
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<400> 15

Ser Ala Val Lys Glu Gln Tyr Pro Gly Ile
1 5 10

<210> 16

<211> 9

<212> PRT

<213> Homo sapiens

<400> 16

Ala Val Lys Glu Gln Tyr Pro Gly Ile
1 5

<210> 17

<211> 8

<212> PRT

<213> Homo sapiens

<400> 17

Gly Ile Glu Ile Glu Ser Arg Leu
1 5

<210> 18

<211> 9

<212> PRT

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Glu Ile Glu Ser Arg Leu Gly Gly Thr
1 5

<210> 19

<211> 10

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<213> Homo sapiens

<400> 19

Arg Leu Gly Gly Thr Gly Ala Phe Glu Ile
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<210> 20

<211> 9

<212> PRT

<213> Homo sapiens

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Gly Thr Gly Ala Phe Glu Ile Glu Ile
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<210> 21

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<210> 22
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<210> 23
<211> 9
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<400> 23

Asp Leu Ile Glu Ala Ile Arg Arg Ala
1 5

<210> 24
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Leu Ile Glu Ala Ile Arg Arg Ala
1 5

<210> 25
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<400> 25

Ala Ile Arg Arg Ala Ser Asn Gly Glu Thr
1 5 10

<210> 26
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<400> 26

Arg Ala Ser Asn Gly Glu Thr Leu

1 5

<210> 27
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Lys Ile Thr Asn Ser Arg Pro Pro Cys Val
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Ile Thr Asn Ser Arg Pro Pro Cys Val
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<400> 29

Ile Thr Asn Ser Arg Pro Pro Cys Val Ile
1 5 10

<210> 30
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<212> PRT
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<400> 30

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<210> 31
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Glu Pro Cys Gly Phe Glu Ala Thr Tyr
1 5

<210> 32
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<400> 32

Ala Ser Asn Gly Glu Thr Leu Glu Lys
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<210> 33

<211> 15

<212> PRT

<213> Unknown

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<223> Synthetic peptide linker

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<210> 34

<211> 15

<212> PRT

<213> Unknown

<220>

<223> Synthetic peptide linker

<400> 34

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ala Ser
1 5 10 15

<210> 35

<211> 10

<212> DNA

<213> Unknown

<220>

<223> Synthetic oligonucleotide PCR primers

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<221> misc_feature

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<223> May be repeated from 10 up to 20 times

<400> 35

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<210> 36

<211> 16

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<223> May be repeated from 10 up to 20 times

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<210> 37
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<400> 37
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<210> 38
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<220>
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<220>
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<212> DNA
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<220>
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<212> DNA
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<220>
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<210> 42
<211> 37
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<213> Unknown

<220>
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<210> 43
<211> 39
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<210> 44
<211> 38
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<220>
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<210> 45
<211> 38
<212> DNA
<213> Unknown

<220>
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<400> 45
aattgcggcc gcaaaccatg ggatggagct gtatcatc 38

<210> 46
<211> 33
<212> DNA
<213> Unknown

<220>
<223> Synthetic oligonucleotide PCR primers

<400> 46
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<210> 47
<211> 83
<212> DNA
<213> Unknown

<220>
<223> Synthetic oligonucleotide

<400> 47
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tggaggctaa cctggtgccc atg 83

<210> 48
<211> 83
<212> DNA
<213> Unknown

<220>
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<400> 48
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cacggagcga gacatatcga tgg 83

<210> 49
<211> 87
<212> DNA
<213> Unknown

<220>
<223> Synthetic oligonucleotide

<400> 49
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gggtcaggag gcatccagcg tactcca 87

<210> 50
<211> 87
<212> DNA
<213> Unknown

<220>
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<400> 50
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aaccgtagcc accatgggca ccagggt 87

<210> 51
<211> 21
<212> DNA
<213> Unknown

<220>
<223> Synthetic oligonucleotide

<400> 51
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<210> 52
<211> 29
<212> DNA
<213> Unknown

<220>
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<400> 52
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<210> 53
<211> 10
<212> PRT
<213> Human immunodeficiency virus

<400> 53

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